

What is claimed is:

1. A method of supporting sales and maintenance of a steam traps, the method utilizes an aggregating system which effects the steps of:

5 inputting stored diagnostic result data and model confirmation result data from a diagnostic device which has diagnosed a working condition of each of a plurality of existing steam traps installed in a customer's plant;

10 calculating, based on said diagnostic result data, a first total steam loss amount due to malfunction of steam traps, the first total steam loss amount comprising aggregation of steam leak amounts of all the existing steam traps;

15 calculating, based on said model confirmation result data, a second total steam loss amount, which comprises aggregation of differences between inherent steam leak amounts of the existing steam traps under their normal working conditions and inherent steam leak amounts of recommended steam traps under their normal working conditions;

20 calculating a monetary conversion value of an integrated value of a sum of the first total steam loss amount and the second total steam loss amount integrated for a predetermined period;

generating comparison data allowing comparison between said monetary converted value and a replacement cost required for lump-sum replacement of all the existing steam traps by the recommended steam traps; and

25 outputting said comparison data for presentation to the customer in sales and/or maintenance activities of the recommended steam traps.

2. The method according to claim 1, wherein,

30 in said inputting step, the aggregating system inputs stored diagnostic result data and model confirmation result data from the

diagnostic device which has diagnosed a working condition of each of some of the plurality of existing steam traps installed in the customer's plant; and

in said step of calculating the first total steam loss amount, the system calculates an estimated value of the first steam loss amount based on the diagnostic result data and also on a trap number ratio comprising a ratio between the number of said some steam traps diagnosed and the total number of the existing steam traps;

in said step of calculating the second total steam loss amount, the system calculates an estimated value of the second total steam loss amount based on said model confirmation result data and also on said trap number ratio; and

in said step of calculating the monetary conversion value, the system calculates the monetary conversion value of an integrated value of a sum of the estimated value of the first total steam loss amount and the estimated value of the second total steam loss amount for the predetermined period.

3. The method according to claim 1, the system effects the further step of adding, to a contract for lump-sum replacement of the steam traps to be concluded between the customer and a seller of the steam traps, a maintenance contract for the seller to act on the customer's behalf for inspection of all of the recommended steam traps newly installed in the plant and renewal of service book of these steam traps associated with the inspection during the predetermined period after the lump-sum replacement of the steam traps.

4. The method according to claim 3, wherein the steam trap service book is stored in a database maintained by the seller in such a manner that the service book is accessible from a customer's terminal via communication means.

5. The method according to claim 1, wherein the aggregating system effects the further steps of inputting stored diagnostic result data from the diagnostic device which has diagnosed a working condition of each of all the recommended steam traps newly installed in the plant after the lump-sum replacement of the existing steam traps by the recommended steam traps; and

storing a steam trap service book comprising said inputted diagnostic result data in a database maintained by the seller.

6. The method according to claim 1, wherein the system effects the further step of adding, to a contract for lump-sum replacement of the steam traps to be concluded between the customer and a seller of the steam traps, a warranty contract for the seller to warrant the newly installed recommended steam traps for the predetermined period after the lump-sum replacement of the existing steam traps.

7. The method according to claim 1, wherein the system effects the further step of adding, to a contract for lump-sum replacement of the steam traps to be concluded between the customer and a seller of the steam traps, a divided payment contract using a credit loan company.

8. The method according to claim 1, wherein in the step of diagnosing the working conditions of the existing steam traps for generating the comparison data or in the step of inspecting the steam traps under the maintenance contract concluded, the system effects the further step of inspecting working conditions of auxiliary plant devices other than and relating to the existing or newly installed recommended steam traps.

9. An aggregating system for use in a method of supporting sales and

maintenance of steam traps, the system comprising:

inputting means for inputting stored diagnostic result data and model confirmation result data from a diagnostic device which has diagnosed a working condition of each of a plurality of existing steam traps  
5 installed in a customer's plant;

first calculating means for calculating, based on said diagnostic result data, a first total steam loss amount due to malfunction of steam traps, the first total steam loss amount comprising aggregation of actual steam leak amounts of all the existing steam traps;

10 second calculating means for calculating, based on said model confirmation data, a second total steam loss amount, which comprises aggregation of differences between inherent steam leak amounts of the existing steam traps under their normal working conditions and inherent steam leak amounts of recommended steam traps under their normal  
15 working conditions;

third calculating means for calculating a monetary conversion value of an integrated value of a sum of the first total steam loss amount and the second total steam loss amount integrated for a predetermined period;

20 comparison data generating means for generating comparison data allowing comparison between said monetary converted value and replacement costs required for lump-sum replacement of all the existing steam traps by the recommended steam traps; and

outputting means for outputting said comparison data in a  
25 predetermined display format.

10. The system according to claim 9, wherein

the inputting means comprises means for inputting stored diagnostic result data and model confirmation result data from the  
30 diagnostic device which has diagnosed a working condition of each of some

of the plurality of existing steam traps installed in the customer's plant; and

the first calculating means comprises means for calculating an estimated value of the first steam loss amount based on the diagnostic result data and also on a trap number ratio comprising a ratio between the number of said some steam traps diagnosed and the total number of the existing steam traps; and

the second calculating means comprises means for calculating an estimated value of the second total steam loss amount based on said model confirmation result data and also on said trap number ratio.

11. The system according to claim 9, further comprising service book producing means for producing a steam trap service book in a predetermined format according to a predetermined procedure, based on the diagnostic result data inputted to the inputting means.

12. The system according to claim 9, wherein  
in addition to the first total steam loss amount, said first calculating means further calculates, based on the diagnostic result data and the trap number ratio inputted to the inputting means, a first sub-total steam loss amount aggregating the steam loss amounts of some of the existing steam traps designated from the existing steam traps; and

in addition to the second total steam loss amount, said second calculating means further calculates, based on the model confirmation result data inputted to the inputting means, a second sub-total steam loss amount aggregating the differences between inherent steam leak amounts of some of the existing steam traps designated from the existing steam traps under their normal working conditions and steam leak amounts of recommended steam traps under their inherent working conditions.

13. The system according to claim 10, wherein

in addition to an estimated value of the first total steam loss amount, said first calculating means further calculates, based on the diagnostic result data and the trap number ratio inputted to the inputting means, an estimated value of a first sub-total steam loss amount aggregating the steam loss amounts of some of the existing steam traps designated from the existing steam traps; and

in addition to an estimated value of the second total steam loss amount, said second calculating means further calculates, based on the model confirmation result data inputted to the inputting means, an estimated value of a second sub-total steam loss amount aggregating the differences between inherent steam leak amounts of some of the existing steam traps designated from the existing steam traps under their normal working conditions and steam leak amounts of recommended steam traps under their inherent working conditions.

14. The system according to claim 9, wherein the second calculating means calculates the second total steam loss amount for each of a plurality of models of recommended steam traps.

15. The system according to claim 10, wherein the second calculating means calculates the estimated value of the second total steam loss amount for each of a plurality of models of recommended steam traps.

16. The system according to claim 12, wherein the second calculating means calculates the second sub-total steam loss amount for each of a plurality of models of recommended steam traps.

17. The system according to claim 13, wherein the second calculating means calculates the estimated value of the second sub-total steam loss amount for each of a plurality of models of recommended steam traps.